Applicant: Henrik Arnberg
Serial No.: 10/599,753

Attorney's Docket No.: 156650010US1 / PD53824US00

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Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application:

1-15. (Canceled)

16. (Currently Amended) A method for treating a mammal suffering from <u>a</u> periodontal disease, comprising locally administering by injection in the proximity of the periodontal disease a therapeutically effective amount of a composition comprising at least one granulocytemacrophage-colony stimulating factor (GM-CSF) polypeptide.

17. (Canceled)

18. (**Previously Presented**) The method of claim 16, wherein the periodontal disease is gingivitis or periodontitis.

19-20. (Canceled)

- 21. (**Previously Presented**) The method of claim 16, wherein the composition is administered by injection through the mucosal lining of the gingiva or by application in a periodontal pocket.
- 22. (**Previously Presented**) The method of claim 16, wherein said GM-CSF is present in the composition in a unit dosage amount of 5 μg to 800 μg.
- 23. (Previously Presented) The method of claim 22, wherein the unit dosage amount is 50 μ g to 100 μ g.
- 24. **(Previously Presented)** The method of claim 16, wherein the composition is administered at intervals ranging from once a day to once every third week.

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25. (**Previously Presented**) The method of claim 16, wherein the composition is administered a total of 1 to 3 times for a period of one week.

26. (**Previously Presented**) The method of claim 16, wherein the composition comprises a therapeutically effective amount of at least one other active ingredient.

27-31. (**Canceled**)

- 32. (**Previously Presented**) The method of claim 16, wherein the composition is administered by injection into the alveolar mucosa.
- 33. (**Previously Presented**) The method of claim 16, wherein the composition is administered by injection into the sublingual mucosa.
- 34. (**Previously Presented**) The method of claim 16, wherein the composition is administered by injection into the palate part.
- 35. (Currently Amended) The method of claim 16, wherein the composition is administered by injection between the periosteum of the alveolar bone and the alveolar mucosa, and wherein a needle used for injection is inserted into a flexible oral muscosa region adjacent to the gingiva.
- 36. (Currently Amended) The method of claim 16, wherein the mammal is a human.
- 37. (**Previously Presented**) A method for inducing tooth calcification in a mammal, comprising locally administering by injection in the proximity of the periodontal disease a therapeutically effective amount of a composition comprising at least one granulocytemacrophage-colony stimulating factor (GM-CSF) polypeptide.

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38. (**Previously Presented**) The method of claim 37, wherein said GM-CSF is present in the composition in a unit dosage amount of 5 μ g to 800 μ g.

- 39. (**Previously Presented**) The method of claim 38, wherein the unit dosage amount is 50 μ g to 100 μ g.
- 40. (**Previously Presented**) The method of claim 37, wherein the composition is administered at intervals ranging from once a day to once every third week.
- 41. (**Previously Presented**) The method of claim 37, wherein the composition is administered a total of 1 to 3 times for a period of one week.
- 42. (**Previously Presented**) The method of claim 37, wherein the composition comprises a therapeutically effective amount of at least one other active ingredient.
- 43. (**Previously Presented**) The method of claim 37, wherein the composition is administered by injection through the mucosal lining of the gingiva or by application in a periodontal pocket.
- 44. (**Previously Presented**) The method of claim 37, wherein the composition is administered by injection into the alveolar mucosa.
- 45. **(Previously Presented)** The method of claim 37, wherein the composition is administered by injection into the sublingual mucosa.
- 46. **(Previously Presented)** The method of claim 37, wherein the composition is administered by injection into the palate part.
- 47. (**Previously Presented**) The method of claim 37, wherein the composition is administered by injection between the periosteum of the alveolar bone and the alveolar mucosa,

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and wherein a needle used for injection is inserted into a flexible oral muscosa region adjacent to the gingiva.

48. (Previously Presented) The method of claim 37, wherein the mammal is a human.